during real-time PCR. These are the DNA binding fluorophores, the 5' endonuclease, adjacent linear and hairpin oligoprobes and the self-fluorescing amplicons, which are described in detail. We also discuss factors that have restricted the development of multiplex real-time PCR as well as the role of real-time PCR in quantitating nucleic acids. Both amplification hardware and the fluorogenic detection chemistries have evolved rapidly as the understanding of real-time PCR has developed and this review aims to update the scientist on the current state of the art. We describe the background, advantages and limitations of real-time PCR and we review the literature as it applies to virus detection in the routine and research laboratory in order to focus on one of the many areas in which the application of real-time PCR has provided significant methodological benefits and improved patient outcomes. However, the technology discussed has been applied to other areas of microbiology as well as studies of gene expression and genetic disease.

L14 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:813016 CAPLUS

DOCUMENT NUMBER:

137:16098

TITLE:

DNA genotyping

AUTHOR(S):

Gold, Bert

CORPORATE SOURCE:

Human Genetics Section Laboratory of Genomic

Diversity, National Cancer Institute, Frederick, MD,

USA

SOURCE:

Advances in Clinical Chemistry (2001), 36, 171-234

CODEN: ACLCA9; ISSN: 0065-2423

Academic Press PUBLISHER:

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

A review on recent technol. developments in DNA genotyping, including the social and economic benefits, and costs of genetic testing. The lengthy review covers numerous classical techniques (such as SSCP, denaturing HPLC, gel electrophoresis, PCR, RFLP, and hybridization) used in genotyping, and also highlights some emerging technologies (such as mol. beacons, microarray, and TaqMan PCR). The review also looks at interpretation of the data to provide proper results to individuals undergoing the genetic testing. (c) 2001 Academic Press.

REFERENCE COUNT:

THERE ARE 87 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

187.69 60.11

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

. 87

SINCE FILE ·

TOTAL

ENTRY SESSION -1.50

CA SUBSCRIBER PRICE

-10.50

FILE 'STNGUIDE' ENTERED AT 10:44:43 ON 28 DEC 2006 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Dec 22, 2006 (20061222/UP).

=> d his full

(FILE 'HOME' ENTERED AT 10:13:09 ON 28 DEC 2006)

FILE 'MEDLINE, BIOSIS, CAPLUS' ENTERED AT 10:14:43 ON 28 DEC 2006 4 SEA PLU=ON (REAL TIME PCR) (10A) AMPLIF?(5A) PRIOR

	D IRIB AB	
L2	61 SEA PLU=ON BRCA1 AND (REAL TIME PCR)	
L3	20 SEA PLU=ON L2 AND (SEQUENC? OR SSCP)	
L4	18 DUP REM L3 (2 DUPLICATES REMOVED)	
	D IBIB AB 1-18	
L5	732 SEA PLU=ON ((REAL TIME PCR) OR TAQMAN OR LIGHT CYCLER OR	
	(REAL TIME POLYMERASE)) AND (DISCOVER? OR SCREEN?) AND (MUT	AT?
	OR POLYMORPH? OR SNP)	
L6	1 SEA PLU=ON L5 AND BRCA## AND PY<2003	
	D IBIB AB	
L7	139 SEA PLU=ON L5 AND DISCOVER?	
L8	31 SEA PLU=ON L7 AND PY<2003	
L9	18 DUP REM L8 (13 DUPLICATES REMOVED)	
	D IBIB AB 1-18	

FILE 'STNGUIDE' ENTERED AT 10:30:38 ON 28 DEC 2006

FILE 'MEDLINE, BIOSIS, CAPLUS' ENTERED AT 10:39:49 ON 28 DEC 2006
L10 8 SEA PLU=ON ((REAL TIME PCR) OR TAQMAN OR LIGHT CYCLER OR
(REAL TIME POLYMERASE)) AND (CONFIRM?(4A) AMPLIF?(4A) PRODUCT)

L11 6 SEA PLU=ON L10 AND PY<2003 L12 4 DUP REM L11 (2 DUPLICATES REMOVED) D IBIB AB 1-4

מג מדמד ח

14 SEA PLU=ON ((REAL TIME PCR) OR TAQMAN OR LIGHT CYCLER OR

(REAL TIME POLYMERASE))(10A) (BENEFIT?)

L14 8 DUP REM L13 (6 DUPLICATES REMOVED)
D TI 1-8
D IBIB AB 7 8

FILE 'STNGUIDE' ENTERED AT 10:44:43 ON 28 DEC 2006

FILE HOME

L13

FILE MEDLINE

FILE LAST UPDATED: 27 Dec 2006 (20061227/UP). FILE COVERS 1950 TO DATE.

All regular MEDLINE updates from November 15 to December 16 have been added to MEDLINE, along with 2007 Medical Subject Headings (MeSH(R)) and 2007 tree numbers.

The annual reload will be available in early 2007.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 27 December 2006 (20061227/ED)

FILE CAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is

strictly prohibited.

FILE COVERS 1907 - 28 Dec 2006 VOL 146 ISS 1 FILE LAST UPDATED: 27 Dec 2006 (20061227/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Dec 22, 2006 (20061222/UP).

=> log hold

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
1.20
188.89

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE

0.00 -10.50

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:56:46 ON 28 DEC 2006